## 42 ABSTRACT OF THE DISCLOSURE

[0165] Optical waveguide fiber having low water peak as well as optical waveguide fiber preforms and methods of making optical waveguide fiber preforms from which low water peak and/or low hydrogen aged attenuation optical waveguide fibers are formed, including optical waveguide fiber and preforms made via OVD. The fibers may be hydrogen resistant, i.e. exhibit low hydrogen aged attenuation. A low water peak, hydrogen resistant optical waveguide fiber is disclosed which exhibits an optical attenuation at a wavelength of about 1383 nm which is less than or equal to an optical attenuation exhibited at a wavelength of about 1310 nm.